

List of Current Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 9 (Cancelled).

10. (Currently Amended) A relative pressure sensor for measuring a pressure difference between a process pressure and an ambient pressure, comprising a measuring unit, having:

a first chamber, which is sealed by a first separating membrane and filled with a transmission medium, said first separating membrane being loadable with the process pressure;

a second chamber, which is sealed by a second separating membrane and filled with a transmission medium, said second separating membrane being loadable with the ambient pressure;

a pressure-sensitive element, which separates said first chamber from said second chamber; and

a damper ~~for damping~~ arranged only between said pressure-sensitive element and said second separating membrane, wherein:

said damper protects said pressure-sensitive element against the effect of excess-pressure pulses acting on said first separating membrane ~~[[,]] wherein [[:]]~~

~~said damper is arranged between said pressure-sensitive element and said second separating membrane.~~

11. (Previously presented) The relative pressure sensor as claimed in claim 10, wherein:

the transmission medium is a hydraulic liquid, especially a silicone oil.

12. (Previously presented) The relative pressure sensor as claimed in claim 10, wherein:

said pressure-sensitive element comprises a measuring membrane, especially

a piezoresistive silicon chip with a measuring membrane.

13. (Previously presented) The relative pressure sensor as claimed in claim 10, wherein:

said damper comprises a sintered body.

14. (Previously presented) The relative pressure sensor as claimed in claim 13, wherein;

the sintered body is a metallic or ceramic, sintered body.

15. (Previously presented) The relative pressure sensor as claimed in claim 10, wherein:

said damper has a porous structure.

16. (Previously presented) The relative pressure sensor as claimed in claim 15, wherein:

the porous structure has a flow-effective pore diameter of not less than 4 μm and not more than 28 μm , preferably between 8 μm and 16 μm .

17. (Previously presented) The relative pressure sensor as claimed in claim 16, wherein:

the porous structure has a porosity between 15 vol.% and 50 vol.%, preferably between 25 vol.% and 35 vol.%.

18. (Previously presented) The relative pressure sensor as claimed in claim 13, wherein:

the sintered body has an essentially cylindrical form and the length of the sintered body in the axial direction is at least twice as large as the diameter.